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* * * * * Welcome to STN International * * * * *

NEWS	1		Web Page for STN Seminar Schedule - N. America
NEWS	2	JAN 02	STN pricing information for 2008 now available
NEWS	3	JAN 16	CAS patent coverage enhanced to include exemplified prophetic substances
NEWS	4	JAN 28	USPATFULL, USPAT2, and USPATOLD enhanced with new custom IPC display formats
NEWS	5	JAN 28	MARPAT searching enhanced
NEWS	6	JAN 28	USGENE now provides USPTO sequence data within 3 days of publication
NEWS	7	JAN 28	TOXCENTER enhanced with reloaded MEDLINE segment
NEWS	8	JAN 28	MEDLINE and LMEDLINE reloaded with enhancements
NEWS	9	FEB 08	STN Express, Version 8.3, now available
NEWS	10	FEB 20	PCI now available as a replacement to DPCI
NEWS	11	FEB 25	IFIREF reloaded with enhancements
NEWS	12	FEB 25	IMSPRODUCT reloaded with enhancements
NEWS	13	FEB 29	WPINDEX/WPIDS/WPIX enhanced with ECLA and current U.S. National Patent Classification
NEWS	14	MAR 31	IFICDB, IFIPAT, and IFIUDB enhanced with new custom IPC display formats
NEWS	15	MAR 31	CAS REGISTRY enhanced with additional experimental spectra
NEWS	16	MAR 31	CA/CAPplus and CASREACT patent number format for U.S. applications updated
NEWS	17	MAR 31	LPCI now available as a replacement to LDPCI
NEWS	18	MAR 31	EMBASE, EMBAL, and LEMBASE reloaded with enhancements
NEWS	19	APR 04	STN AnaVist, Version 1, to be discontinued
NEWS	20	APR 15	WPIDS, WPINDEX, and WPIX enhanced with new predefined hit display formats
NEWS	21	APR 28	EMBASE Controlled Term thesaurus enhanced
NEWS	22	APR 28	IMSRESEARCH reloaded with enhancements
NEWS	23	MAY 30	INPAFAMDB now available on STN for patent family searching
NEWS	24	MAY 30	DGENE, PCTGEN, and USGENE enhanced with new homology sequence search option
NEWS	25	JUN 06	EPFULL enhanced with 260,000 English abstracts
NEWS	26	JUN 06	KOREAPAT updated with 41,000 documents
NEWS	27	JUN 13	USPATFULL and USPAT2 updated with 11-character patent numbers for U.S. applications
NEWS	28	JUN 19	CAS REGISTRY includes selected substances from web-based collections
NEWS	29	JUN 25	CA/CAPplus and USPAT databases updated with IPC reclassification data
NEWS	30	JUN 30	AEROSPACE enhanced with more than 1 million U.S. patent records

10/529,074

07/07/2008

NEWS 31 JUN 30 EMBASE, EMBAL, and LEMBASE updated with additional
options to display authors and affiliated
organizations
NEWS 32 JUN 30 STN on the Web enhanced with new STN AnaVist
Assistant and BLAST plug-in
NEWS 33 JUN 30 STN AnaVist enhanced with database content from EPFULL

NEWS EXPRESS JUNE 27 08 CURRENT WINDOWS VERSION IS V8.3,
AND CURRENT DISCOVER FILE IS DATED 23 JUNE 2008.

NEWS HOURS STN Operating Hours Plus Help Desk Availability
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* * * * * STN Columbus * * * * *

FILE 'HOME' ENTERED AT 12:12:34 ON 07 JUL 2008

=> FILE REG

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.21	0.21

FILE 'REGISTRY' ENTERED AT 12:13:11 ON 07 JUL 2008

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STRUCTURE FILE UPDATES: 6 JUL 2008 HIGHEST RN 1032827-24-9

DICTIONARY FILE UPDATES: 6 JUL 2008 HIGHEST RN 1032827-24-9

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH January 9, 2008.

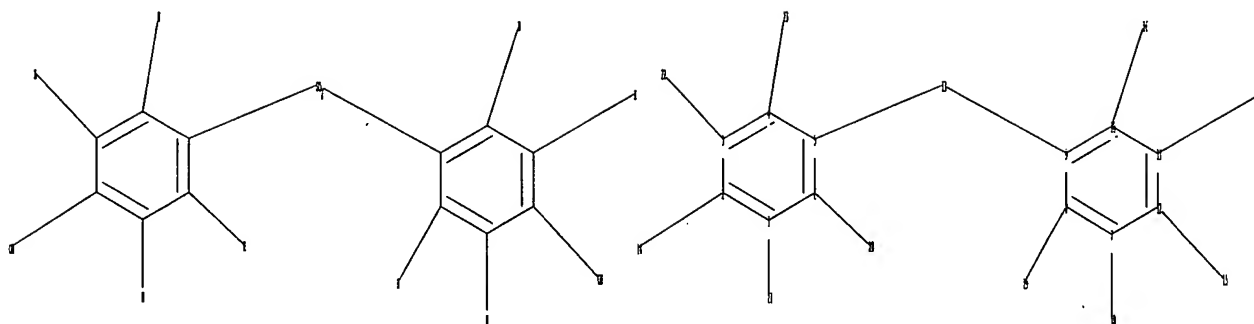
Please note that search-term pricing does apply when
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REGISTRY includes numerically searchable data for experimental and
predicted properties as well as tags indicating availability of
experimental property data in the original document. For information
on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stndoc/properties.html>

=>

Uploading C:\Program Files\Stnexp\Queries\GL-110.str



chain nodes :

13 14 15 16 17 18 19 20 21 22 23

ring nodes :

1 2 3 4 5 6 7 8 9 10 11 12

chain bonds :

1-21 2-14 3-22 4-23 5-13 6-20 7-18 8-19 9-13 10-16 11-17 12-15

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12

exact/norm bonds :

2-14 12-15

exact bonds :

1-21 3-22 4-23 5-13 6-20 7-18 8-19 9-13 10-16 11-17

normalized bonds :

1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom

11:Atom 12:Atom 13:CLASS 14:CLASS 15:CLASS 16:CLASS 17:CLASS 18:CLASS

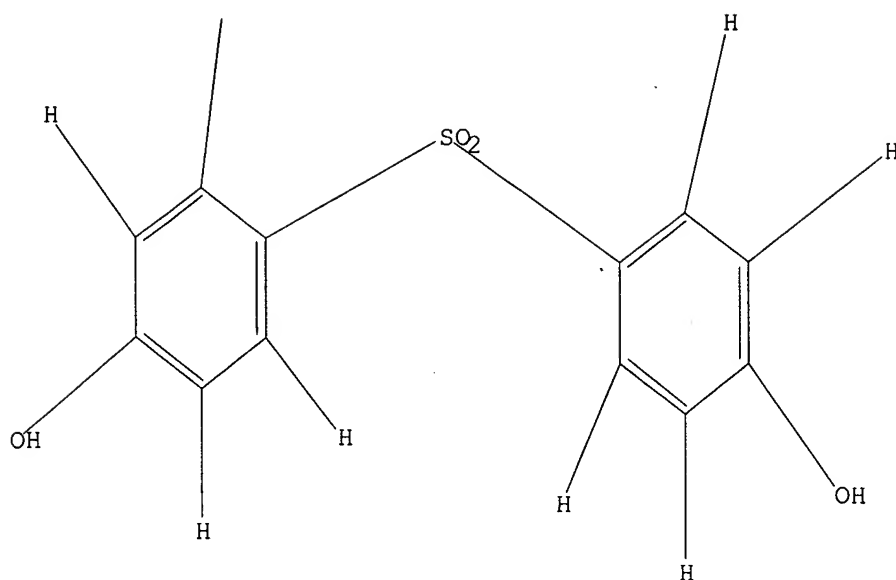
19:CLASS 20:CLASS 21:CLASS 22:CLASS 23:CLASS

L1 STRUCTURE UPLOADED

=> D L1

L1 HAS NO ANSWERS

L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> S L1 FULL

FULL SEARCH INITIATED 12:13:36 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 28068 TO ITERATE

100.0% PROCESSED 28068 ITERATIONS

1690 ANSWERS

SEARCH TIME: 00.00.01

L2 1690 SEA SSS FUL L1

=> FILE CAPLUS

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

178.36

178.57

FILE 'CAPLUS' ENTERED AT 12:13:43 ON 07 JUL 2008

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FILE COVERS 1907 - 7 Jul 2008 VOL 149 ISS 2

FILE LAST UPDATED: 6 Jul 2008 (20080706/ED)

10/529,074

07/07/2008

Caplus now includes complete International Patent Classification (IPC) reclassification data for the second quarter of 2008.

Effective October 17, 2005, revised CAS Information Use Policies apply. They are available for your review at:

<http://www.cas.org/legal/infopolicy.html>

=> S L2

L3 3963 L2

=> S L3 AND PHENOL

262582 PHENOL

L4 865 L3 AND PHENOL

=> S L4 AND DEHYDRATION

105265 DEHYDRATION

L5 20 L4 AND DEHYDRATION

=> S L5 AND POLAR SOLVENT

160474 POLAR

744905 SOLVENT

10239 POLAR SOLVENT

(POLAR(W) SOLVENT)

L6 1 L5 AND POLAR SOLVENT

=> S L5 AND MESITYLENE

8286 MESITYLENE

L7 4 L5 AND MESITYLENE

=> S L7 AND POLAR SOLVENT

160474 POLAR

744905 SOLVENT

10239 POLAR SOLVENT

(POLAR(W) SOLVENT)

L8 1 L7 AND POLAR SOLVENT

=> D L8 IBIB ABS HITSTR 1

L8 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:287831 CAPLUS

DOCUMENT NUMBER: 140:321107

TITLE: Process for preparation of high-purity
4,4'-dihydroxydiphenylsulfone

INVENTOR(S): Ogata, Eiji; Oi, Fumio; Yanase, Norio; Nate, Nobuyuki

PATENT ASSIGNEE(S): Konishi Chemical Ind. Co., Ltd., Japan

SOURCE: PCT Int. Appl., 20 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004029020	A1	20040408	WO 2003-JP12049	20030922
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM,			

PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN,
 TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
 KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
 FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,
 BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
 AU 2003266552 A1 20040419 AU 2003-266552 20030922
 CN 1684943 A 20051019 CN 2003-823044 20030922
 US 20050272956 A1 20051208 US 2005-529074 20050324
 PRIORITY APPLN. INFO.: JP 2002-279199 A 20020925
 WO 2003-JP12049 W 20030922

OTHER SOURCE(S): CASREACT 140:321107

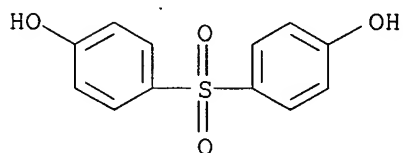
AB This invention pertains to a method for producing 4,4'-
 dihydroxydiphenylsulfone having an extremely high purity, which comprises
 subjecting phenol and either a sulfonating agent or
 phenylsulfonic acid to a dehydration reaction, and is
 characterized by conducting the dehydration reaction in the
 presence of a nonpolar aromatic solvent while suspending the
 dihydroxydiphenyl sulfones generated, mixing a polar
 solvent with the suspension resulting from the reaction to
 dissolve at least part of the dihydroxydiphenylsulfones, and then crystallizing
 4,4'-dihydroxydiphenylsulfone. For example, phenol was treated
 with 98% H₂SO₄ in mesitylene to give 4,4'-
 dihydroxydiphenylsulfone (83%) with 99.5% purity.

IT 80-09-1P

RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP
 (Preparation)
 (preparation of high-purity dihydroxydiphenylsulfones)

RN 80-09-1 CAPLUS

CN Phenol, 4,4'-sulfonylbis- (CA INDEX NAME)



=> D L6 IBIB ABS HIT STR 1

'STR' IS NOT A VALID FORMAT FOR FILE 'CAPLUS'

The following are valid formats:

ABS ----- GI and AB
 ALL ----- BIB, AB, IND, RE
 APPS ----- AI, PRAI
 BIB ----- AN, plus Bibliographic Data and PI table (default)
 CAN ----- List of CA abstract numbers without answer numbers
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 CLASS ----- IPC, NCL, ECLA, FTERM
 DALL ----- ALL, delimited (end of each field identified)
 DMAX ----- MAX, delimited for post-processing
 FAM ----- AN, PI and PRAI in table, plus Patent Family data
 FBIB ----- AN, BIB, plus Patent FAM
 IND ----- Indexing data
 IPC ----- International Patent Classifications
 MAX ----- ALL, plus Patent FAM, RE

PATS ----- PI, SO
 SAM ----- CC, SX, TI, ST, IT
 SCAN ----- CC, SX, TI, ST, IT (random display, no answer numbers;
 SCAN must be entered on the same line as the DISPLAY,
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 its structure diagram
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 FHITSTR ----- First HIT RN, its text modification, its CA index name, and
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 BIB ----- AN, plus Bibliographic Data and PI table (default)
 CAN ----- List of CA abstract numbers without answer numbers
 CBIB ----- AN, plus Compressed Bibliographic Data
 CLASS ----- IPC, NCL, ECLA, FTERM
 DALL ----- ALL, delimited (end of each field identified)
 DMAX ----- MAX, delimited for post-processing
 FAM ----- AN, PI and PRAI in table, plus Patent Family data
 FBIB ----- AN, BIB, plus Patent FAM

IND ----- Indexing data
IPC ----- International Patent Classifications
MAX ----- ALL, plus Patent FAM, RE
PATS ----- PI, SO
SAM ----- CC, SX, TI, ST, IT
SCAN ----- CC, SX, TI, ST, IT (random display, no answer numbers;
SCAN must be entered on the same line as the DISPLAY,
e.g., D SCAN or DISPLAY SCAN)
STD ----- BIB, CLASS

IABS ----- ABS, indented with text labels
IALL ----- ALL, indented with text labels
IBIB ----- BIB, indented with text labels
IMAX ----- MAX, indented with text labels
ISTD ----- STD, indented with text labels

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HIT ----- Fields containing hit terms
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FHITSTR ----- First HIT RN, its text modification, its CA index name, and
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FHITSEQ ----- First HIT RN, its text modification, its CA index name, its
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ENTER DISPLAY FORMAT (BIB):END

=> D L6 IBIB ABS HITSTR 1

L6 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2004:287831 CAPLUS
DOCUMENT NUMBER: 140:321107
TITLE: Process for preparation of high-purity
4,4'-dihydroxydiphenylsulfone
INVENTOR(S): Ogata, Eiji; Oi, Fumio; Yanase, Norio; Nate, Nobuyuki
PATENT ASSIGNEE(S): Konishi Chemical Ind. Co., Ltd., Japan
SOURCE: PCT Int. Appl., 20 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004029020	A1	20040408	WO 2003-JP12049	20030922
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
AU 2003266552	A1	20040419	AU 2003-266552	20030922
CN 1684943	A	20051019	CN 2003-823044	20030922
US 20050272956	A1	20051208	US 2005-529074	20050324
PRIORITY APPLN. INFO.:			JP 2002-279199	A 20020925
			WO 2003-JP12049	W 20030922

OTHER SOURCE(S): CASREACT 140:321107

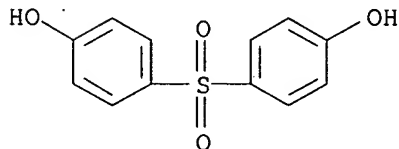
AB This invention pertains to a method for producing 4,4'-dihydroxydiphenylsulfone having an extremely high purity, which comprises subjecting phenol and either a sulfonating agent or phenylsulfonic acid to a dehydration reaction, and is characterized by conducting the dehydration reaction in the presence of a nonpolar aromatic solvent while suspending the dihydroxydiphenyl sulfones generated, mixing a polar solvent with the suspension resulting from the reaction to dissolve at least part of the dihydroxydiphenylsulfones, and then crystallizing 4,4'-dihydroxydiphenylsulfone. For example, phenol was treated with 98% H₂SO₄ in mesitylene to give 4,4'-dihydroxydiphenylsulfone (83%) with 99.5% purity.

IT 80-09-1P

RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)
(preparation of high-purity dihydroxydiphenylsulfones)

RN 80-09-1 CAPLUS

CN Phenol, 4,4'-sulfonylbis- (CA INDEX NAME)



=> D L7 IBIB ABS HITSTR 1-4

L7 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:287831 CAPLUS

DOCUMENT NUMBER: 140:321107

TITLE: Process for preparation of high-purity
4,4'-dihydroxydiphenylsulfone

INVENTOR(S): Ogata, Eiji; Oi, Fumio; Yanase, Norio; Nate, Nobuyuki
PATENT ASSIGNEE(S): Konishi Chemical Ind. Co., Ltd., Japan
SOURCE: PCT Int. Appl., 20 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004029020	A1	20040408	WO 2003-JP12049	20030922
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
AU 2003266552	A1	20040419	AU 2003-266552	20030922
CN 1684943	A	20051019	CN 2003-823044	20030922
US 20050272956	A1	20051208	US 2005-529074	20050324
PRIORITY APPLN. INFO.:			JP 2002-279199	A 20020925
			WO 2003-JP12049	W 20030922

OTHER SOURCE(S): CASREACT 140:321107

AB This invention pertains to a method for producing 4,4'-dihydroxydiphenylsulfone having an extremely high purity, which comprises subjecting phenol and either a sulfonating agent or phenylsulfonic acid to a dehydration reaction, and is characterized by conducting the dehydration reaction in the presence of a nonpolar aromatic solvent while suspending the dihydroxydiphenyl sulfones generated, mixing a polar solvent with the suspension resulting from the reaction to dissolve at least part of the dihydroxydiphenylsulfones, and then crystallizing

4,4'-dihydroxydiphenylsulfone.

For example, phenol was treated with 98% H₂SO₄ in mesitylene to give 4,4'-dihydroxydiphenylsulfone (83%) with 99.5% purity.

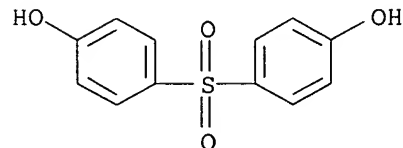
IT 80-09-1P

RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)

(preparation of high-purity dihydroxydiphenylsulfones)

RN 80-09-1 CAPLUS

CN Phenol, 4,4'-sulfonylbis- (CA INDEX NAME)



L7 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1994:482709 CAPLUS
DOCUMENT NUMBER: 121:82709

ORIGINAL REFERENCE NO.: 121:14849a,14852a
 TITLE: Preparation of 2,4'-dihydroxydiphenyl sulfone
 INVENTOR(S): Hosoda, Masaaki; Kurose, Mikihiro; Sasada, Sachihiro;
 Saito, Hajime; Makino, Kimihiro
 PATENT ASSIGNEE(S): Nikka Chemical Ind Co Ltd, Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 06107622	A	19940419	JP 1993-152920	19930531
JP 07119195	B	19951220		
JP 06107623	A	19940419	JP 1993-152921	19930531
JP 07119196	B	19951220		
US 5399772	A	19950321	US 1993-164855	19931210
EP 627415	A1	19941207	EP 1993-120018	19931211
EP 627415	B1	19970910		

R: CH, DE, FR, GB, LI

PRIORITY APPLN. INFO.:
 JP 1992-179003 A1 19920612
 JP 1993-152920 A 19930531
 JP 1993-152921 A 19930531

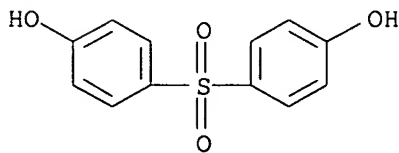
OTHER SOURCE(S): CASREACT 121:82709

AB The title sulfones, useful as coloring agents for heat-sensitive papers, are prepared with good selectivity and in good yields by heating phenols with H₂SO₄ in the presence of at least one of phosphonic acid, phosphinic acid, and their salts (1) in an aromatic hydrocarbon solvent (b.p. 130-200°) with azeotropic removal of H₂O or (2) without solvent at 140-170° under reduced pressure. Thus, a mixture of phenol 793, H₂SO₄ 334, and phosphinic acid 16.5 g underwent dehydration at 150-165° and 560-260 mmHg for 3 h and after obtaining 250 g raffinate 165 g phenol was added followed by dehydration at 260-100 mmHg for 2 h to give 180 g raffinate. Addnl. 165 g phenol was added and dehydration was continued at 260-100 mmHg for 2 h to give 140 g raffinate. The reaction mixture was washed with H₂O to remove phenolsulfonic acid and dried to give 85% isomeric dihydroxydiphenyl sulfones consisting of 2,4'-dihydroxydiphenyl sulfone 49, 4,4'-dihydroxydiphenyl sulfone 50, and others 1 weight%.

IT 80-09-1P, 4,4'-Dihydroxydiphenyl sulfone
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of, as coloring agent for heat-sensitive papers)

RN 80-09-1 CAPLUS

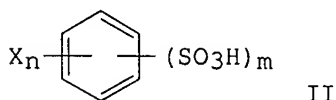
CN Phenol, 4,4'-sulfonylbis- (CA INDEX NAME)



L7 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 1992:570972 CAPLUS
 DOCUMENT NUMBER: 117:170972
 ORIGINAL REFERENCE NO.: 117:29541a,29544a

TITLE: Preparation of highly pure 4,4'-dihydroxydiphenyl sulfone.
 INVENTOR(S): Ogata, Eiji; Nate, Nobuyuki
 PATENT ASSIGNEE(S): Konishi Kagaku Kogyo Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

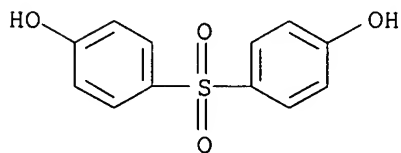
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 04145061	A	19920519	JP 1990-265833	19901002
JP 08002863	B	19960117		
PRIORITY APPLN. INFO.:			JP 1990-265833	19901002
OTHER SOURCE(S):		CASREACT 117:170972; MARPAT 117:170972		
GI				



AB In the preparation of the title compound (I), phenol is reacted with a sulfonating agent in mesitylene containing an arenepolysulfonic acid [II; X = halo; n = 0, 1; m = 2, 3]. To a mixture of phenol, mesitylene, and 1,3-benzenedisulfonic acid (III) was added 98.1% H2SO4, the reaction mixture was then heated to 145°, at which temperature it was distilled to give a 2-phase distillate. The 2 phases were separated, the

upper phase (organic) was continuously returned to the reaction mixture. After four hours (the reaction reaching 165°) a 97.9:2.1 product mixture of I and 2,4'-dihydroxydiphenyl sulfone was obtained vs. a 89.3:9.0:1.7 product mixture of I, 2,4'-dihydroxydiphenyl sulfone, and trihydroxydiphenyl sulfone if III was not used. 1,3,5-Benzenetrissulfonic acid and chloro-2,4-benzenedisulfonic acid were also used.

IT 80-09-1P, 4,4'-Dihydroxydiphenyl sulfone
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of, by sulfonation of phenol)
 RN 80-09-1 CAPLUS
 CN Phenol, 4,4'-sulfonylbis- (CA INDEX NAME)

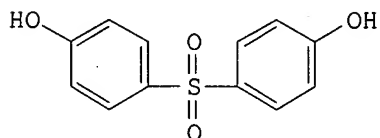


L7 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 1991:428885 CAPLUS
 DOCUMENT NUMBER: 115:28885
 ORIGINAL REFERENCE NO.: 115:5065a,5068a
 TITLE: Process for preparing 4,4'-dihydroxydiphenyl sulfone

INVENTOR(S): Ogata, Eiji; Nate, Nobuyuki
 PATENT ASSIGNEE(S): Konishi Chemical Industry Co., Ltd., Japan
 SOURCE: PCT Int. Appl., 32 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9104245	A1	19910404	WO 1990-JP1179	19900914
W: US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, IT, LU, NL, SE				
JP 03101656	A	19910426	JP 1989-239523	19890914
JP 07091261	B	19951004		
JP 03206073	A	19910909	JP 1989-340699	19891229
JP 08002861	B	19960117		
JP 03206074	A	19910909	JP 1989-340700	19891229
JP 08002862	B	19960117		
EP 443046	A1	19910828	EP 1990-913547	19900914
EP 443046	B1	19940413		
R: DE, GB				
US 5189223	A	19930223	US 1991-678332	19910501
US 5241121	A	19930831	US 1992-904887	19920625
PRIORITY APPLN. INFO.:			JP 1989-239523	A 19890914
			JP 1989-340699	A 19891229
			JP 1989-340700	A 19891229
			WO 1990-JP1179	W 19900914
			US 1991-752589	B1 19910828

OTHER SOURCE(S): CASREACT 115:28885; MARPAT 115:28885
 GI



I

AB The title compound (I) was prepared by heating phenol with sulfuric acid in mesitylene and by converting 2,4'-dihydroxydiphenyl sulfone, formed in the dehydration reaction, to I by heating at isomerization temperature. Thus, phenol was heated with 98% H₂SO₄ in mesitylene at 145° and the distillate was heated at 165° for 5 h to give 93.0% I.

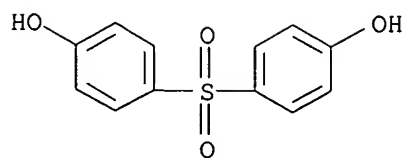
IT 80-09-1P, 4,4'-Dihydroxydiphenyl sulfone
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of, from phenol and sulfuric acid)

RN 80-09-1 CAPLUS

CN Phenol, 4,4'-sulfonylbis- (CA INDEX NAME)

10/529,074

07/07/2008



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---Logging off of STN---

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Executing the logoff script...

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COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

51.38

229.95

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

TOTAL

ENTRY

SESSION

CA SUBSCRIBER PRICE

-4.80

-4.80

STN INTERNATIONAL LOGOFF AT 12:18:45 ON 07 JUL 2008